SUMMARY ASSESSMENT SIGN-OFF SHEET

For COCA Site: CFA-30 (Tank 744)

Approved by:

J. C. Hull, Manager — Date 5/9/91
COCA Management and Implementation

Reviewed by:

W. R. Pigott, Manager, WAG-4 — Date May 9, 1991

J. P. Shea, ERP Independent Review Chairman — Date May 7, 1991

CFA-30
SUMMARY ASSESSMENT
April 15, 1991

1. UNIT NAME

CFA-30 Waste Oil Tank (#744) at Building Central Facilities Area (CFA)-665.

2. INTRODUCTION

CFA-30 was a bulk storage tank used to collect used and waste oil products from the vehicle maintenance facility (Big Shop) CFA-665. CFA-30 was labeled as a Consent Order and Compliance Agreement (COCA)[1] site because of the possibility of hazardous waste or material stored in the tank contaminating groundwater.

Information contained in this summary assessment was obtained from current inventory records, historical tank use records, and sampling and laboratory analytical results. The information presented summarizes CFA-30 activities to date.

3. PHYSICAL DESCRIPTION

CFA-30 was a 1000-gallon capacity underground storage tank constructed of tar-coated carbon steel, and it was located near the north side of Building CFA-665. Figure 1 shows a diagram of the location of CFA-30, and Figure 2 is a photograph of the tank's location before it was removed.

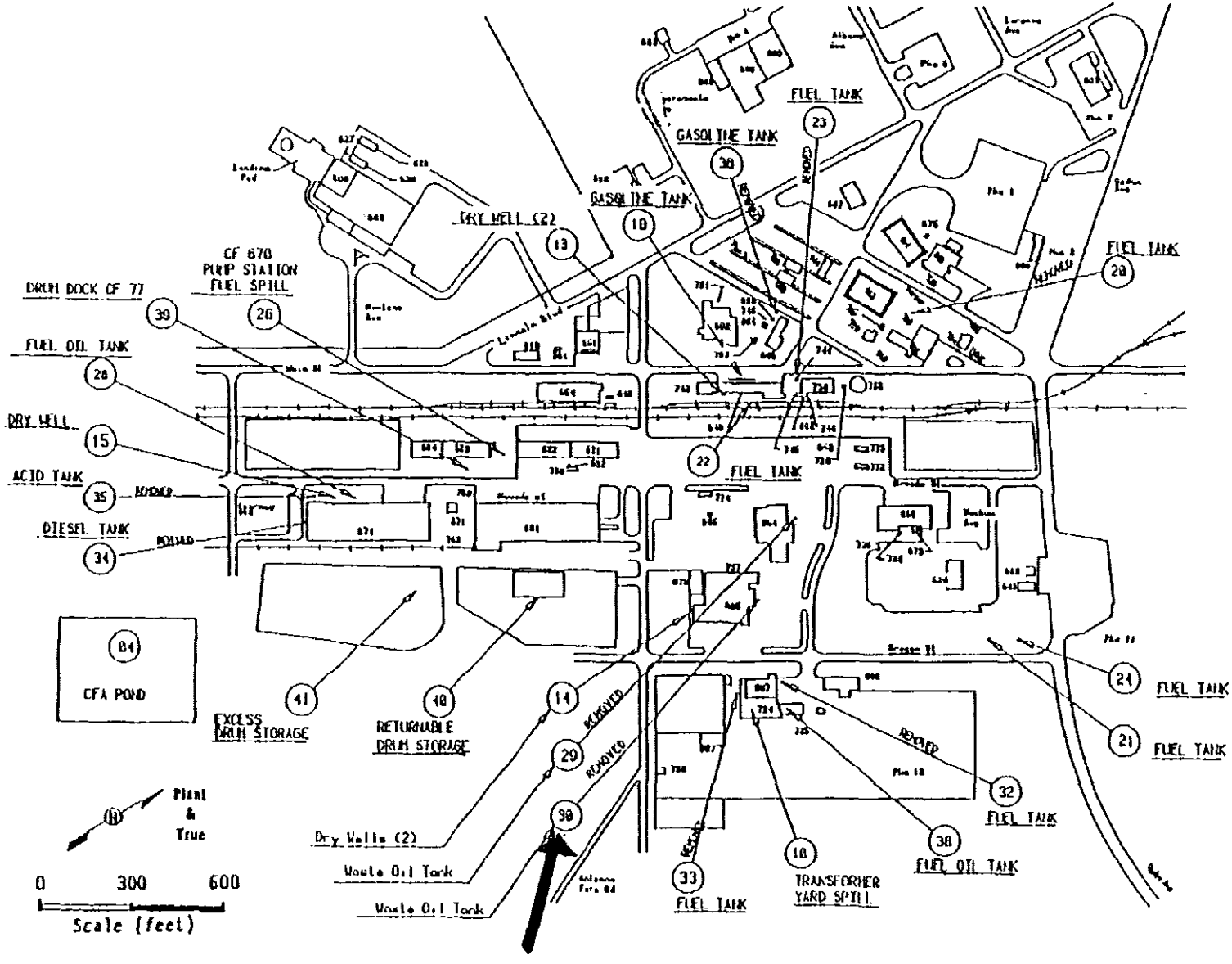


Figure 1. Map of the south portion of CFA showing COCA Unit 30 (Tank 744), other COCA units, and CFA buildings.

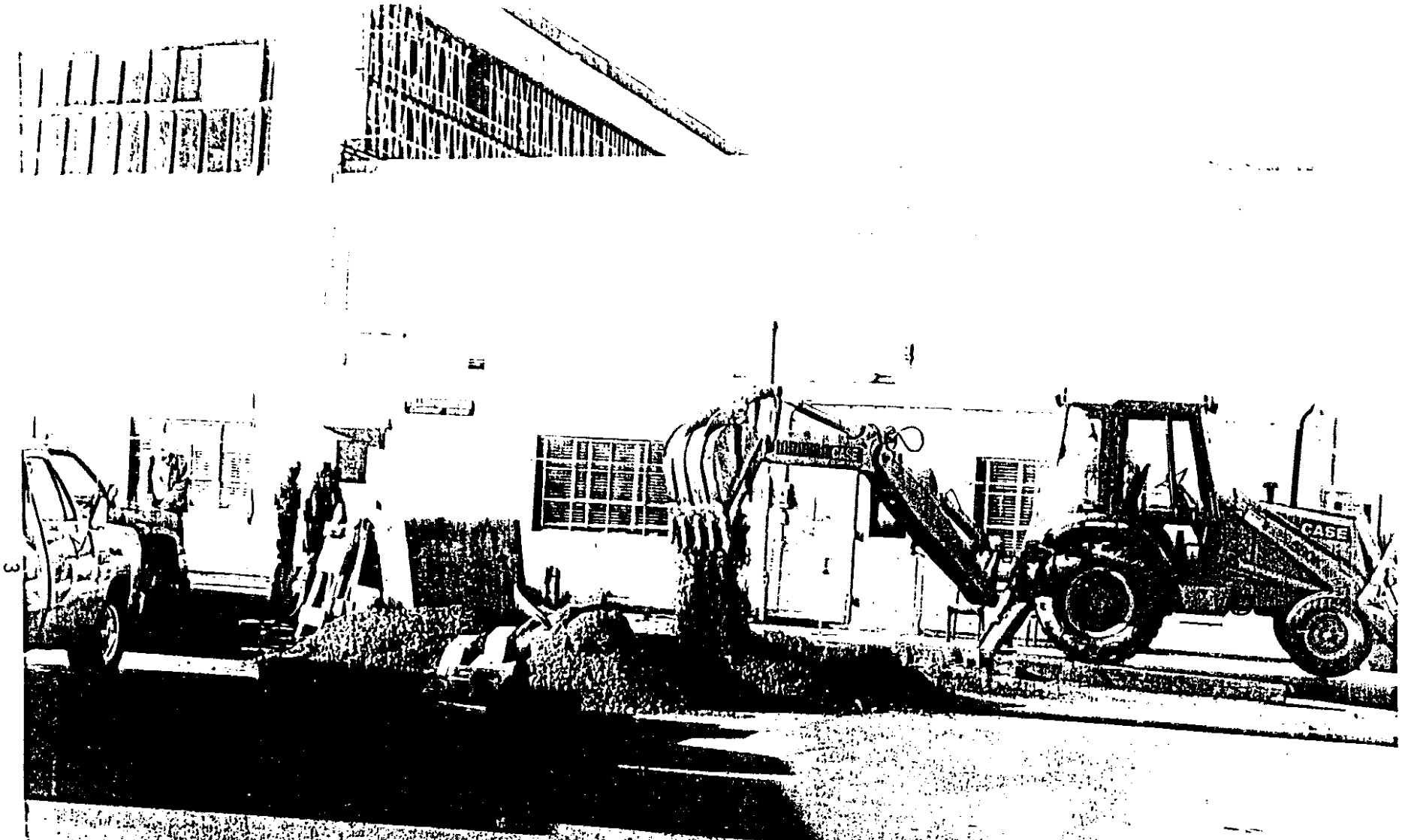


Figure 2. Location of COCA Unit CFA-30

4. PURPOSE AND HISTORY OF UNIT

The tank at CFA-30 was installed in 1960 and was used as a bulk storage tank for collecting used and waste oil products from the crankcases of buses and other equipment at the vehicle maintenance facility CFA-665. An initial survey of CFA-30 was conducted in October 1986.

On August 26, 1989, a Petro-Tite Tank System Tightness Test was performed on CFA-30. CFA-30 failed the tank tightness test (with a net volume loss of -20.000 gallons per hour) and subsequently was scheduled for removal. The source of the leak was a rubber stopper on top of the tank. The product was pumped from tank following the test.

5. RESULTS OF INITIAL ASSESSMENT

CFA-30 received a score of 3.2 using the Environmental Protection Agency Priority Ranking System. This score was based on the assumption that the tank contained waste oil.

6. RESULTS OF SUMMARY ASSESSMENT

CFA-30 should be removed from the universe of Solid Waste Management Units because the tank was removed and the site was determined to be free of hazardous constituents.

7. METHODS OF SUMMARY ASSESSMENT

7.1 INEL Site Development Plan

Figure 12 in the INEL Site Development Plan[2] shows CFA-30 as a 1000-gallon capacity waste oil storage tank.

7.2 Tank Removal Procedure

The tank was exhumed and the tank bed was sampled on September 29, 1989. Figures 3 and 4 show CFA-30 tank postremoval and the tank excavation site, respectively. For safety and sampling purposes, volatile organic compound levels in the tank excavation and excavated soils were monitored by the EG&G Idaho Environmental Technology Unit staff using a Photovac Microtip Photoionization Detector (PID) (following procedures outlined in EG&G, 1990[3]).

Excavation soil samples collected underneath the tank at CFA-30 were sent to Data Chem Laboratories in Salt Lake City, Utah, for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method SW-846-8020.[4] The samples were also analyzed by Data Chem Laboratories for total petroleum hydrocarbons (TPH) using the California Department of Health Services Method.[5] However, all data used to support this summary assessment are unvalidated.

7.3 Laboratory Analysis of Soil Samples, Data Chem Laboratories

Contaminant concentrations in the soil were compared to action levels per an agreement with EPA Region 10 and the Idaho Department of Health and Welfare, Division of Environmental Quality. Action limits defined in this agreement follow the State of California Department of Health Services LUFT Field Manual.[6] The maximum allowable action levels for BTEX and TPH in diesel waste oil are .3, .3, 1, 1, and 1000 ppm, respectively.

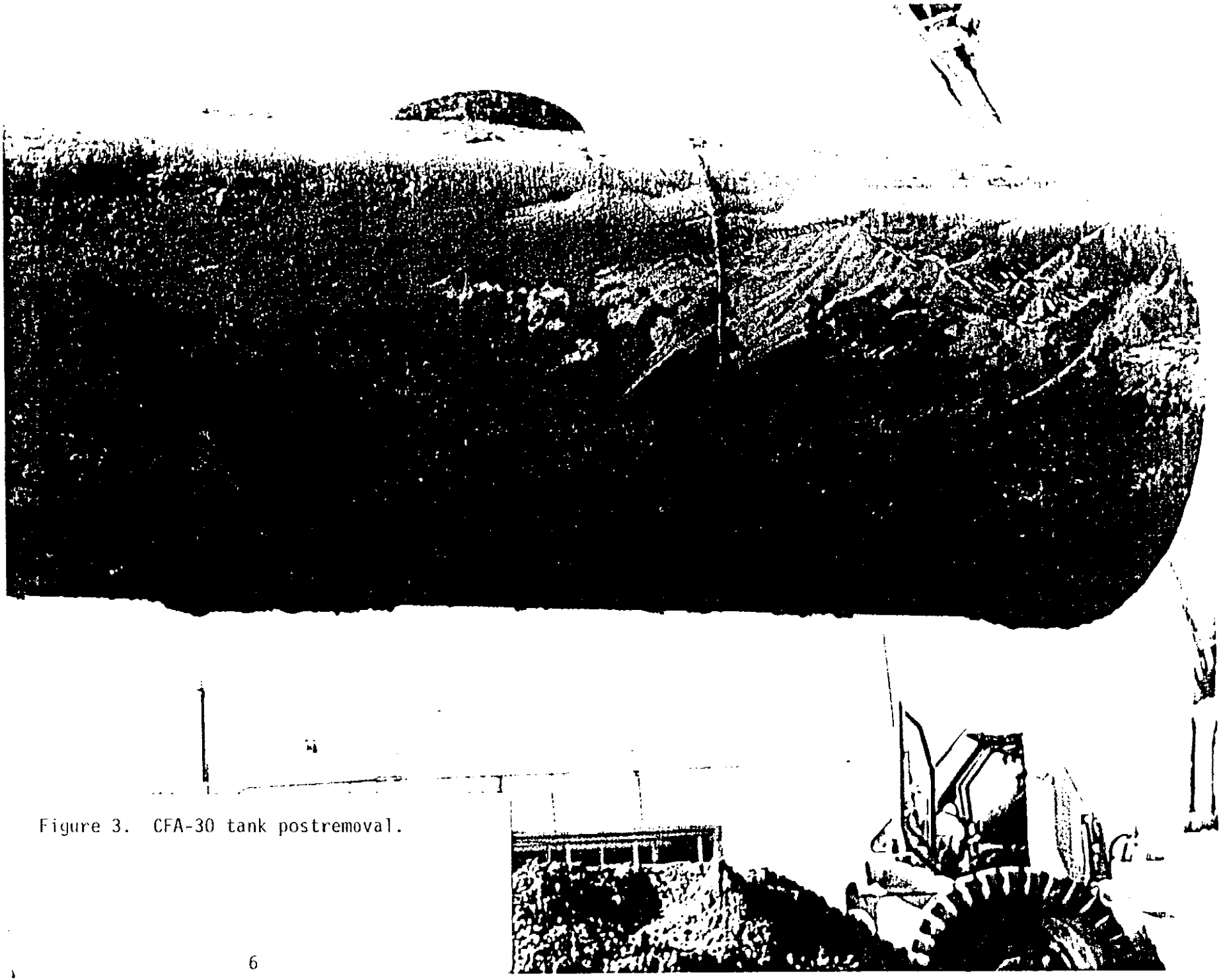


Figure 3. CFA-30 tank postremoval.

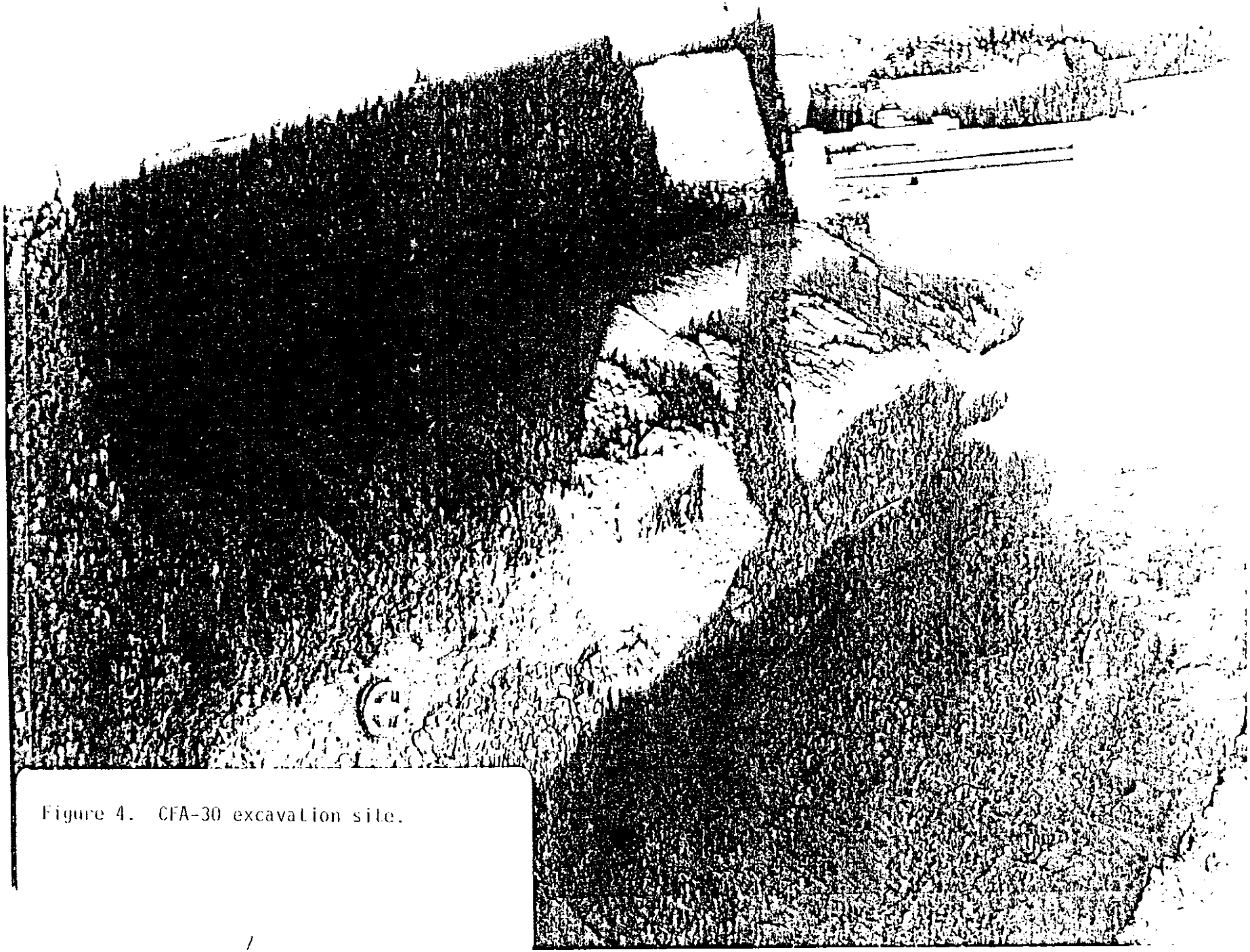


Figure 4. CFA-30 excavation site.

Independently, the INEL Tank Management Program has imposed more conservative action limits of .25, .25, .8, .8, and 800 ppm for BTEX and TPH, respectively. Analytical results for BTEX testing of CFA-30 soil samples ranged from ND (parameter not detected) to .10 ppm. Soil samples for TPH testing ranged from 3.0 to 76.0 ppm, levels below the most conservative action limits. These test results confirm a noncontaminated status.

7.4 Tank Completion Activities

CFA-30 was removed on September 29, 1989. Following excavation, the pit was backfilled with the clean soil that had been removed and with clean soil from the gravel pit at the Idaho National Engineering Laboratory CFA. Tank 744 was moved to the tank storage yard at CFA, cut up, and excessed to the State of Idaho, Lost River Highway Department, to be used for road culverts.

8. SITE OBSERVATIONS

During a site visit on February 26, 1991, it was noted that CFA-30 was level, it contained an adequate amount of backfill dirt, the area that had surrounded the tank appeared clean, and the COCA CFA-30 sign was posted accordingly.

9. CONCLUSIONS

Based on the historical records of CFA-30, laboratory analyses of the soil samples from the area surrounding the exhumed tank, and appearance of the restored site, CFA-30 should be removed from the universe of Solid Waste Management Units. The site has been determined to be clean, and the tank has been removed and disposed of properly.

10. REFERENCES

1. Consent Order and Compliance Agreement 1085-10-07-3008: In the matter of: United States Environmental Protection Agency and the United States Department of Energy, Idaho National Engineering Laboratory ID4890008952. Proceedings under Section 3008(h) of the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. Section 692 8(h).

2. EG&G Idaho (EG&G Idaho, Inc.), 1985, Site Development Plan, May.

3. EG&G Idaho (EG&G Idaho, Inc.), 1990, Sample Analysis Plan for Site Assessment During the Closure or Replacement of Nonradioactive Underground Storage Tanks, EGG-ESQ-9116, August.

4. EPA (U.S. Environmental Protection Agency), 1986, Test Methods for Evaluating Solid Waste, Physical Chemical Methods, 3rd edition, SW-846.

5. California State Water Resources Control Board, 1988, Leaking Underground Fuel Tank (LUFT) Manual, May.

6. State of California Leaking Underground Fuel Tank Task Force, 1988, Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, May.

CFA
4

IDAHO UNDERGROUND STORAGE TANK
Permanent Closure Form

Site Owner/Operator: U. S. Department of Energy, Id Ops. Office
Site Address: 785 DOE Place
Site County: Bonneville
Telephone: (208) 526-0193 Facility ID (Notification Number: ______

Tank was previously (X) Registered ( ) Never Registered
Fire District: INEL, Scoville, Idaho
Local Closure Permit obtained from : Not Applicable
Tank Closure Performed By:
Company: EG&G Idaho, Inc. Telephone: 526-9876
Date of Closure: ______ Method of Closure: Removal (X) In-Place Closure ( )
If closed in-place, type of fill material used: ______
How will old tanks be disposed of? ( ) Scrap ( ) Landfill ( )
Other(specify) Recycled
Disposal Location: ______

TANKS CLOSED

Tank ID#	Age	Size	Last Substance Stored
CFA 741-6	29	10,000	Diesel
CFA 743	38	2,000	Waste Oil
CFA 744	29	1,000	Waste Oil
PBF 741	25	500	Diesel
TAN/IET 1711	32	50,000	Diesel
TAN/IET 1712	32	30,000	Heating Oil
TAN/IET 1713	32	20,000	Diesel

Will tanks be replaced by new underground tanks? Yes ( ) No ( )
(NOTE: If yes, you need to submit a notification form for the new tanks.)

Site assessment was completed and: ( ) No contamination was found
(X) Contamination was found
(NOTE: Regional office of the Idaho Bureau of Water Quality should be contacted for assistance if contamination is found. Records of closure must also be maintained at the site and available upon inspector's request for three years after closure).

Inspecting Agency: Not Applicable Inspector's Name: ______
(NOTE: This is generally the local fire department. In some instances there may be no inspecting agency).

Owner/Operator Signature: ______ Date: ______

Return completed for to:
UST Coordinator, Water Quality Bureau
Idaho Department of Health and Welfare
Division of Environmental Quality
450 West State St.
Boise, Idaho 83720
Phone (208) 334-5845

Notification for Underground Storage Tanks

FOR TANKS IN ID

RETURN COMPLETED FORM TO: UST Coo[r]dinator, Water Quality Bureau, Idaho Dept. of Health & Welfare, Division of Environment, 450 W. State Street, Boise, ID 83720, (208) 334-5845

CFA 744

STATE USE ONLY — I.D. Number: 130043 — Date Received: MAR 23 1990

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means—

(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

(b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fumigants.

What Tanks Are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws;
5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where To Notify? Completed notification forms should be sent to the address given at the top of this page.

When To Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use.

Penalties: Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed $10,000 for each tank for which notification is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. **This form must by completed for each location containing underground storage tanks.** If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

Indicate number of continuation sheets attached: 2

I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity): U.S. Department of Energy, Idaho Ops. Office

Street Address: 785 DOE Place 3491

County: Bonneville

City: Idaho Falls — State: Idaho — ZIP Code: 83401

Area Code: (208) — Phone Number: 526-0193

Type of Owner (Mark all that apply ☒)

- ☒ Current
- ☐ Former
- ☐ State or Local Gov't
- ☒ Federal Gov't (GSA facility I.D. no. 10890808968)
- ☐ Private or Corporate
- ☐ Ownership uncertain

II. LOCATION OF TANK(S)

(If same as Section 1, mark box here ☐)

Facility Name or Company Site Identifier, as applicable: Idaho National Engineering Laboratory (INEL) Location: CFA

Street Address or State Road, as applicable: Scoville, Idaho

County: Butte

City (nearest): Arco — State: Idaho — ZIP Code: 83213

Indicate number of tanks at this location: 17

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands ☐

III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here ☐): W. C. Lattin — Job Title: Environmental Scientist — Area Code: (208) — Phone Number: 526-1508

IV. TYPE OF NOTIFICATION

☐ Mark box here only if this is an amended or subsequent notification for this location.

V. CERTIFICATION (Read and sign after completing Section VI)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative: Robert E. Tiller, Acting Manager, DOE-ID

Signature: [signature]

Date Signed: 3-21-90

CONTINUE ON REVERSE SIDE

DATE 03/13/90

INEL UNDERGROUND STORAGE TANKS

INEL TANK NUMBER		STATE OF IDAHO NO.	CURRENT STATUS	AGE 1990	GALLON/ CAPACITY	CONST. MATERIAL	INTERNAL PROTEC.	EXTERNAL PROTEC.	PIPING MATERIAL	CONTENTS		LAST REMAIN USED GALLONS	INERT
CFA 606-E1	1		3 ABANDONED 1950	48 42	10,000	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	3 GASOLINE	1950	
CFA 606-E2	2		3 ABANDONED 1950	48 42	10,000	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	1 DIESEL	1950	
CFA 680	3		3 OUT-OF-SERVICE	51 39	55	4 UNKNOWN	4 UNKNOWN	5 UNKNOWN	2 GALV. STEEL	PETROLEUM	3 GASOLINE	1983	
CFA 713-4	4		1 ACTIVE	51 39	10,000	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	3 GASOLINE		
CFA 713-5	5		1 ACTIVE	51 39	8,000	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	3 GASOLINE		
CFA 731	6		1 ACTIVE	81 6	12,000	1 STEEL	2 LINED	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	3 AVIATION FUEL		
CFA 735	7		1 ACTIVE	59 31	500	1 STEEL	3 NONE	TAR 6-Spec.	2 GALV. STEEL	PETROLEUM	1 DIESEL		
CFA 737	8		1 ACTIVE	63 27	2,000	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	1 DIESEL		
CFA 741-6	9		5 REMOVED	60 30	10,000	1 STEEL	3 NONE	2 PAINTED	2 GALV. STEEL	PETROLEUM	1 DIESEL	1989	
CFA 741-7	10		1 ACTIVE	60 30	10,000	1 STEEL	3 NONE	2 PAINTED	2 GALV. STEEL	PETROLEUM	1 DIESEL		
CFA 743	11		5 REMOVED	51 39	2,000	1 STEEL	4 UNKNOWN	5 UNKNOWN	1 STEEL	PETROLEUM	4 WASTE OIL	1989	
CFA 744	12		5 REMOVED	60 30	1,000	1 STEEL	3 NONE	4 NONE	1 STEEL	PETROLEUM	4 WASTE OIL	1989	
CFA 746	13		3 OUT-OF-SERVICE	82 8	285	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	1 DIESEL		
CFA 748-A	14		1 ACTIVE	50 40	500	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	1 DIESEL		
CFA 748-B	15		1 ACTIVE	50 40	500	1 STEEL	3 NONE	2 PAINTED	6 TAR COATED STEEL	PETROLEUM	1 DIESEL		
CFA 763	16		3 OUT-OF-SERVICE	UNK	15,000	1 STEEL	4 UNKNOWN	5 UNKNOWN	5 UNKNOWN	PETROLEUM	4 WASTE OIL	1985	

~~120043~~

3481

120043

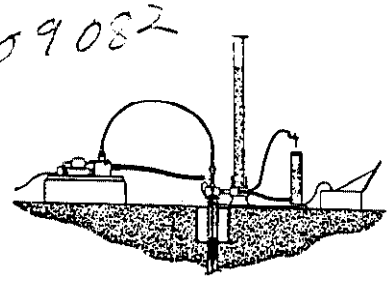
DATE 03/13/90

INEL UNDERGROUND STORAGE TANKS

INEL TANK NUMBER	STATE OF IDAHO NO.	CURRENT STATUS	AGE 1990	GALLON/ CAPACITY	CONST. MATERIAL	INTERNAL PROTEC.	EXTERNAL PROTEC.	PIPING MATERIAL	CONTENTS		LAST USED	REMAIN GALLONS	INERT
		17	76		1	3	6	1		5			
CFA MTN BELL 01		OUT-OF-SERVICE	15	1,000	STEEL	NONE	TAR	STEEL	PETROLEUM	GASOLINE		250	

3481
120043

09082



Precision Tank Testing

A Division of
CS Systems, Inc.
P.O. Box 10345
Cheyenne, WY 82003
(307) 637-3493

E G & G Idaho, Inc.
Mr. Keith Jones
Project Manager
P.O. Box 1625
Idaho Falls, ID 83415-2512

Dear Mr. Jones:

On August 26, 1989, a Petro-Tite Tank System Tightness Test was performed at: CFA Idaho National Engineering Laboratory.

The test was performed by Gene Fischer.

NFPA Code 329 Precision Test criterion of .05 GPH is not intended to imply that there is an acceptable level of leakage. Because of the almost infinate variables involved, this criterion is intended to be a mathematical tolerance and is not the permission of actual leakage.

Tank location: CFA-744 Size: 1000 gal. Product: Waste Oil

Tank Test	( )	plus	
Net Volume Change	(*)	minus	-20.000 gallons per hour - (Estimated)

Based on the above criterion, we find the system:

( ) Passed
(*) **FAILED THE TANK TIGHTNESS TEST.**

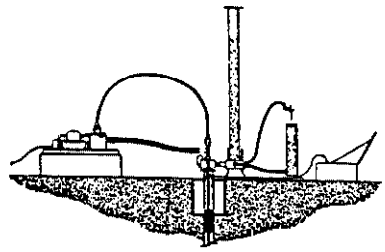
This concludes our test and findings on this date.

Respectfully,

Gene Fischer
Manager

Precision Tank Testing

A Division of
CS Systems, Inc.
P.O. Box 10345
Cheyenne, WY 82003
(307) 637-3493



August 29, 1989

E G & G Idaho, Inc.
Mr. Kelly Jones
Project Manager
P.O. Box 1625
Idaho Falls, ID 83415

Dear Mr. Jones:

The following product was upgraded, downgraded, transferred, or lost due to Petro-Tite underground line testing at: CFA-744 Idaho National Engineering Laboratory.

Product lost due to tank and line testing.

Unlead	N/A gallons
Diesel	Estimated 20 gallons

If there are any questions, please call us at 307-637-3493.

Respectfully,

Gene Fischer
Manager

JOB # 546-6

Page NA of NA

Data Chart for Tank System Tightness Test

PLEASE PRINT

1 OWNER (Property ✓, Tank ✓)	Name: CFA — Address: INEL — Representative — Telephone: NA
2 OPERATOR	Name: NA — Address — Telephone
3 REASON FOR TEST (Explain Fully)	REGULATIONS
4 WHO REQUESTED TEST AND WHEN	Name: EG & G — Title: CONTRACT C89-102497 — Company or Affiliation — Date: JUNE 89
5 TANK INVOLVED (Use additional lines for manifolded tanks)	Identify by Direction: CFA 744 Building 665 — Capacity: 1000 — Brand Supplier: NA — Grade: WASTE OIL — Approx Age: 1960 29 YEARS — Steel Fiberglass: STEE.
6 INSTALLATION DATA	Location: CFA — Cover: CONCRETE — Fills: 3" NO DROP TUBE — Vents: 2" VENT — Siphones: NONE — Pumps: NONE
7 UNDERGROUND WATER	Depth to the Water table: 400 + FT — Is the water over the tank: ☐ Yes ☒ No
8 FILL-UP ARRANGEMENTS	Tanks to be filled: 8-24-89 — Arranged by: KEITH JONES EG&G — Extra product to "top off" and run tank tester: PET DRUM — Terminal or other contact for notice of inquiry: Company, Name, Telephone
9 CONTRACTOR, MECHANICS, Any other contractor involved	
10 OTHER INFORMATION OR REMARKS	TEST WITH WASTE DIESEL FUEL
11 TEST RESULTS	Tests were made on the above tank systems in accordance with test procedures prescribed for as detailed on attached test charts with results as follows:

Tank Identification	Tight	Leakage Indicated	Date Tested
CFA - 744 1000 GALLON WASTE OIL TANK SYSTEM		ESTIMATED -20,000 GPH FAILED	AUGUST 26, 1989

12 SENSOR CERTIFICATION: Date JUL 4 89 — Serial No. of Thermal Sensor 1923

13. This is to certify that these tank systems were tested on the date(s) shown. Those indicated as "Tight" meet the criteria established by the National Fire Protection Association Pamphlet 329.

Technician: [signature] — Certification # 923910832

COPY

Precision Tank Testing
A Division Of
CS Systems, Inc.
P.O. Box 10345
Cheyenne, WY 82003
(307) 637-3493

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14 CFA — INEL — AUGUST 25 26 1989 (Name of Supplier, Owner or Dealer — Address (No. and Street) — City — State — Date of Test)

15 TANK TO TEST: CFA 744 (Identify by position) — NA / WASTE OIL (Brand and Grade)

15a. BRIEF DIAGRAM OF TANK FIELD: CF665 — WASTE OIL

16. CAPACITY: Nominal Capacity 1000 Gallons — By most accurate capacity chart available 1034 Gallons — From: ☐ Station Chart ☐ Tank Manufacturer's Chart ☒ Company Engineering Data ☒ Charts supplied with ☐ Other

17 FILL-UP FOR TEST: Stick Water Bottom before Fill-up 1 1/4" — 8 Gallons — Tank Diameter 48" X 11' — TE = 3.42 READ = 4 — Inventory 49" — Total Gallons as Reading 995 — WE ADD 120 = -8 — Transfer total to line 25a

18 SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK — See manual sections applicable. Check below and record procedure in log (27)

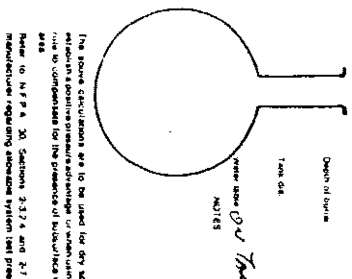
☒ Water in tank NO (Tank(s) being tested with LVLLT) — ☒ NA High water table in tank excavation

Maximum allowable test pressure for oil tests. Four pound rule does not apply to double-walled tanks.

Complete section below: GRADE TO 12" =

1. Is four pound rule required? Yes ☒ No ☐
2. Height to 12" mark from bottom of tank ____ in
3. Pressure at bottom of tank ____ PSI
4. Pressure at top of tank ____ PSI

Depth of burial 50 in — Tank dia. 48" in — Water table ON TANK 0 in — NOTES



The above calculations are to be used for dry soil conditions to establish a positive pressure advantage or when using the four pound rule to compensate for the presence of subsurface water in the tank area.

Refer to N.F.P.A. 30, Sections 2-3.2.4 and 2-7.2 and the tank manufacturer regarding allowable system test pressures.

19. TANK MEASUREMENTS FOR TSTT ASSEMBLY
- Bottom of tank to grade* 98 in.
- Add 30" for "T" probe assy 30 in.
- Total tubing to assemble – approximate 11' 128 in.

20. EXTENSION HOSE SETTING
- Tank top to grade* 50 in
- Extend hose on suction tube 6" or more below tank top 56 in

*If Fill pipe extends above grade, use top of fill

22. Thermal-Sensor reading after circulation ____ digits ____ °F

23. Digits per °F in range of expected change ____ Between ____ digits

COEFFICIENT OF EXPANSION (Complete after circulation)

24a. Corrected A.P.I. Gravity NA
- Observed A.P.I. Gravity
- Hydrometer employed ____ H
- Observed Sample Temperature ____ °F
- Corrected A.P.I. Gravity @ 60°F, From Table A
- Coefficient of Expansion for Involved Product From Table B
- Transfer COE to Line 25b

21. VAPOR RECOVERY SYSTEM NONE

24b. COEFFICIENT OF EXPANSION RECIPROCAL METHOD — TESTING WITH DIESEL FUEL
- Type of Product
- Hydrometer Employed ____ H
- Temperature in Tank After Circulation ____ °F
- Temperature of Sample ____ °F
- Difference (+/-) ____ °F
- Observed A.P.I. Gravity
- Reciprocal ____ Page # ____
- Total quantity in full tank (16 or 17) ÷ Reciprocal = Volume change in this tank per °F — Transfer to Line 26a.

SEE TEST LOG

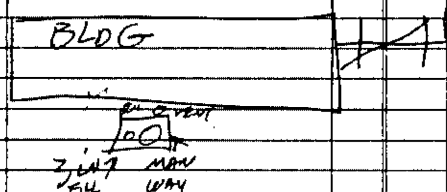
24c. FOR TESTING WITH WATER (see Table C & D) NA
- Water Temperature after Circulation Table C ____ °F
- Coefficient of Water Table D
- Added Surfactant? ☐ Yes ☐ No — Transfer COE to Line 25b

25. (a) NA (Total quantity in full tank (16 or 17)) × (b) NA (Coefficient of expansion for involved product) = (c) NA gallons (Volume change in this tank per °F)

26. (a) SEE TEST LOG (Volume change per °F (25 or 24b)) ÷ (Digits per °F in test Range (23)) = ____ (Volume change per digit, Compute to 4 decimal places) This is test factor (a)

27	Sensor Calibration 16595 16583 — LOG OF TEST PROCEDURES	30. HYDROSTATIC PRESSURE CONTROL	31. VOLUME MEASUREMENTS (V) RECORD TO .001 GAL	34. TEMPERATURE COMPENSATION	38. NET VOLUME CHANGE EACH READING	39. ACCUMULATED CHANGE
28 DATE / TIME (24 hr)	CFA-744 1000 GALLON WASTE OIL — Record details of setting up and running test (Use full length of line if needed)					
	TESTING THIS WASTE OIL TANK WITH DIESEL FUEL.					
	DIESEL FUEL TO BE METERED INTO TANK TO DETERMINE					
	EXACT CAPACITY.					
1630	8-25-89					
	24" MAN WAY IS NOT BOLTED DOWN & MAN WAY HOLE					
	IS FULL OF DIESEL FUEL. 3" FILL PIPE 1¼" H₂O IN TANK.					
	NO DROP TUBE, 4" FILL PIPE WITH 5" REDUCER TO GRADE.					
	KNOWN REMOTE FILL INSIDE BUILDING - 5"					
0745	8-26-89 ARRIVED JOB SITE, PUMPED 40 GALLON OUT					
	OF TANK TO FACILITATE MAINTENANCE PEOPLE.					
0900	DRILLED & TAPPED MAN WAY COVER & REMOTE 3" FILL IN BUILDING					
1100	FILLED TANK - MAN WAY LEAKS.					
	PIPE FITTER INSTALLED [illegible] GORE TEX ON MAN-WAY					
	COVER.					
1200	ATTEMPTED TO TEST TANK. STAND PIPE					
	WILL NOT HOLD ANY VOLUME. UN-ABLE TO STABILIZE TANK.					
1300	DUE TO ENVIRONMENTAL CONCERNS & [illegible] POLICY					
	TESTING STOPPED.					
	ACTUAL PRODUCT LOSS EXCEEDED 20 GALLONS					
1900	AUDIT DATA.					

CONTINUATION: CFA 744 1000 GALLON WASTE OIL TANK



Tank Test Data Chart
Additional Info

ESTIMATED – 20.000
1. Net Volume Change at Conclusion of Precision Test ______ gph

Signature of Tester [signature]

Date AUGUST 26, 1989

2. Statement
N/A Tank and product handling system has been tested tight according to the Precision Test Criteria as established by N.F.P.A. publication 329. This is not intended to indicate permission of a leak.

OR

X Tank and product handling system has failed the tank tightness test according to the Precision Test Criteria as established by N.F.P.A. publication 329.

It is the responsibility of the owner and/or operator of this system to immediately advise state and local authorities of any implied hazard and the possibility of any reportable pollution to the environment as a result of the indicated failure of this system. Heath Consultants Incorporated does not assume any responsibility or liability for any loss of product to the environment.

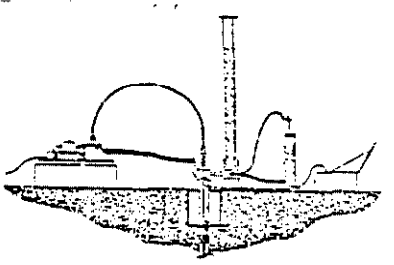
Tank Owner Operator [signature]

Date 8/26/89

89065

Precision Tank Testing

A Division of
CS Systems, Inc.
P.O. Box 10345
Cheyenne, WY 82003
(307) 637-3493



SUMMARY TEST REPORT

All tank and line testing was performed using the Petro-Tite method for underground tank and line testing.

The following is a discussion of tanks tested, test results, and problems encountered. Tanks are listed by date tested and location.

Mr. Keith Jones, Project Manager, was briefed on test results, problems encountered and product lost due to tank and line testing.

All tanks tested have the following discrepancies:

1. Vent caps do not meet national code.
2. Vent lines are not extended above buildings in accordance with national code.
3. Fill pipe connecting points do not meet national code.
4. Metal gauge sticks to determine product level are in use. The E.P.A. has identified these metal gauging sticks as a cause for UST failures.
5. The tank fill pipes are not marked as to contents of tank.

DAY #1
Date: 8-14-89
Test Location: CPP

Tank #: SAA152

Test Result: +.035 GPH

Passed: *

Failed:

Problems Encountered: None

Tank #; SAA153

Test Result: +.016 GPH

Passed: *

Failed:

Problems Encountered: None

Day #2
Date: 8-15-89
Test Location: CPP

Tank #: HBF102

Test Result: +.014 GPH

Passed: *

Failed:

Problems Encountered:

1. This is a non-labled tank, which is not approved for underground burial. Project manager briefed on this item.
2. The bushing in tank top leaked when the tank was filled up into the fill pipe. Precision Tank Testing repaired this leak.
3. The height of vent line does not meet national code.

Tank #: CFG 6003

Test Result: -.417 GPH

Passed:

Failed: *

Problems encountered:

1. Discussed tank re-test with PM as tank is burried 78" from grade to tank top.

DAY #3
Date: 8-16-89
Test Location: PBF

Tank #: 741

Test Result: -12.000 GPH

Passed:

Failed: *

Problems Encountered:

1. The tank has a tin cover on it, with sheet metal screws and silicone sealant. This type of cover or fastening method does not meet EPA regulations. PM was at job site.

DAY #4
Date: 8-17-89
Test Location: TAN

Tank #: Tan792

Test Result: -.028 GPH

Passed: *

Failed:

Problems Encountered: None

Day #5
Date: 8-18-89
Test Location: Tan

Tank #: Tan 783

Test Result: -.034 GPH

Passed: *

Failed:

Problems Encountered:

1. This tank took too long to stabilize tank end deflection, or it may be baffled on the inside.

DAY #6
Date: 8-19-89
Test Location: CFA

Tank #: 713-4

Test Result: +.018 GPH

Passed: *

Failed:

Problems Encountered: None

Tank #: 713-5

Test Result: Re-test #1
+.001 GPH

Passed: *

Failed:

Problems Encountered:

1. During initial testing it was discovered that the tank has a 24" man way in top.
2. The vent line was down sloped from the tank. This caused a trap in the vent line.

Day #7
Date: 8-20-89
Test Location: CFA

Tank #: 741-7

Test Result: +.035 GPH

Passed: *

Failed:

Problems Encountered: None

Tank #; 741-6

Test Result: -87.000 GPH

Passed:

Failed: *

Problems Encountered:

1. This tank has a hole in it with a rubber plug. It leaks. This repair does not comply with national code.
2. The product line is leaking visibly, out side island under dispenser. The gate valve is leaking on both sides at 1 1/2" x 2" bushings.

Day #8
Date: 8-21-89
Test Location: IRC

Tank #: 01SSW104

Test Result: +.019GPH

Passed: *

Failed:

Problems Encountered:

1. No leak detector installed on product line. Remote pressurized system.

Day #9
Date: 8-22-89
Test Location: NRF

Tank #: 01SSW511

Test Result: +.012GPH

Passed: *

Failed:

Problems Encountered: None

Tank #: 01SSW503

Test Result: visible leak

Passed:

Failed: *

Problems Encountered:
1. When the tank was filled for testing, the STP riser pipe had a leak in threads where it screws into tank top.

Day #10
Date: 8-23-89
Test Location: CPP

Tank #: CFG 6003

Re-Test #1 Result: -.986 GPH

Passed:

Failed: *

Problems Encountered:

1. Tank top is not totally exposed and piping to pump house is still connected to tank.
2. Pipe fitters are reluctant to disconnect all piping from tank top.

Day #11
Date: 8-24-89
Test Location: NRF

Tank #: O1SSW503

Re-Test #1 Result: -.0495 GPH

Passed: *

Failed:

Problems Encountered:

1. The low level test data indicates this tank has a small leak. See data chart for Re-Test #1. PM briefed on this tank.

Day #12
Date: 8-25-89
Test Location: CPP

Re-Test #2 Result: -.456 GPH

Passed:

Failed: *

Problems Encountered:

1. Delays in getting piping disconnected from tank to pump house.
2. PM briefed on this tank.

Day #13
Date: 8-26-89
Test Location: CFA

Tank #: 743

Test Result: -34.000 GPH

Passed:

Failed: *

Problems Encountered:
1. Tank was waste oil. Testing medium was waste diesel fuel.
2. Tank was pumped out after tank testing.

Tank #: 744

Test Result: -20.000 GPH

Passed:

Failed: *

Problems Encountered:
1. Tank was waste oil. Testing medium was waste diesel fuel.
2. Tank was pumped out after tank testing

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

Date 4/10/91
Agency Identification Number S89-0666-AB
Account No. 03018

EG&G Idaho - INEL
P.O. Box 1625
Idaho Falls, ID 83415-2109
Attention: Charles W. Ariss

Telephone (208) 526-9055

Sampling Collection and Shipment

Sampling Site ____________ Date of Collection September 29, 1989

Date Samples Received at DataChem October 03, 1989

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	CPA-743-1 EI 2981	CPA-743-2 EI 2982	CPA-743-3 EI 2983	CPA-744-1 EI 2984	CPA-744-2 EI 2985	CPA-744-3 EI 2986	MS EI 2987	
Benzene 10/05/1989 8020	µg/g	ND*	ND*	ND*	ND*	ND*	ND*	.90	
Ethyl Benzene 10/05/1989 8020	µg/g	ND*	ND*	ND*	ND*	ND*	.10 100ff	.90	
Toluene 10/05/1989 8020	µg/g	ND*	ND*	ND*	ND*	ND*	ND*	.90	
Xylene 10/05/1989 8020	µg/g	ND*	ND*	ND*	ND*	ND*	ND*	2.0	

! See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
' Analyses completed on or before this date.
** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

Analyst: James R. Baxter

Report regenerated from archives.

Reviewer:

Rand Potter

Laboratory Supervisor:

960 West LeVoy Drive ...

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 4/10/91
Agency Identification Number S89-0666-AB
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Idaho Falls, ID 83415-2109
Attention: Charles W. Ariss

Telephone (208) 526-9055

Sampling Collection and Shipment

Sampling Site _____ Date of Collection September 29, 1989

Date Samples Received at DataChem October 03, 1989

Analytical Results

Parameter Name / Analysis Date / Method	Units	MSD EX 2988							Method Detection Limit
Benzene 10/05/1989 8020	µg/g	.90							.05
Ethyl Benzene 10/05/1989 8020	µg/g	.90							.05
Toluene 10/05/1989 8020	µg/g	.90							.05
Xylene 10/05/1989 8020	µg/g	2.0							.05

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
' Analyses completed on or before this date.

** Parameter not analysed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date _____

Agency Identification Number S89-0666-AB

General Set Comments

Samples EI2987 and EI2988 are matrix spikes of sample EI2981 to which 1.ug/g of benzene, ethylbenzene, and toluene and 2.ug/g of xylene have been added.

TANK SAMPLING & DISPOSAL CHECKLIST [1]

TANK NUMBER CPA 744

Tank Content Sampling

Content Sampling Required: YES ____ NO ____ DATE _____

Doc. #		Received
1)	Hazardous Waste Manifest (Hazardous Waste Only)	
2)	Waste Profile Sheet-669 Report (Hazardous Waste Only)	
3)	Gamma Analysis (Hazardous Waste Only)	
4)	Product Removal/Disposal Documentation	
5)	Product Disposal Recommendations/Suggestions	
6)	Sample Analysis Validation	X
7)	Chain of Custody Documentation	
8)	Sample Analysis Results	
9)	Sample Logbook (copy)	

Tank Removal Sampling

Removal Sampling Complete: YES ____ NO ____ DATE _____

Doc. #		Received
10)	Hazardous Waste Manifest (Hazardous Waste Only)	
11)	Waste Profile Sheet-669 Report(Hazardous Waste Only)	
12)	Gamma Analysis (Hazardous Waste Only)	
13)	Analysis of Results / Recommendation	
14)	Sample Analysis Validation	
15)	Chain of Custody Documentation	
16)	Sample Analysis Results	
17)	Sample Logbook (copy)	

Sludge Sampling

Sludge Sampling Complete: YES ____ NO ____ DATE _____

Doc. #		Received
1)	Hazardous Waste Manifest (Hazardous Waste Only)	
	aste Profile Sheet-669 Report(Hazardous Waste Only)	
	ma Analysis (Hazardous Waste Only)	
	t Removal/Disposal Documentation	
	Disposal Recommendations/Suggestions	
	lysis Validation	
	ody Documentation	
	Results	
	opy)	

VIEW THE NOTE E01

From: LAS --INELVM1 Date and time 06/13/90 09:03:21
To: JOC --INELVM1 J E COODY

From: LAS
Subject: ANALYSIS OF SLUDGE SAMPLES.

JOHN,

PER OUR TELEPHONE CONVERSATION ABOUT THE SOURCE OF THE SLUDGE THAT WAS SAMPLED, BY PERSONAL KNOWLEDGE, THOSE SAMPLES WERE TAKEN FROM SLUDGE REMOVED FROM TANK CFA 743 (1000 GAL. WASTE OIL TANK) AND TANK CFA 744 (1000 GAL. WASTE OIL TANK). TANK CFA 743 WAS REMOVED FROM BESIDE BUILDING CF 664. TANK CFA 744 WAS REMOVED FROM IN FRONT OF BUILDING CF 665.

THESE TANKS RECEIVED THE WASTE OIL THAT WAS DRAINED FROM THE CRANKCASES OF BUSES AND OTHER EQUIPMENT DURING OIL CHANGES.

IF I CAN BE OF ANY FURTHER ASSISTANCE, FEEL FREE TO GIVE ME A CALL OR YOU CAN CONTACT ME VIA PROFS.

PF1 Alternate PFs PF2 File NOTE PF3 Keep PF4 Erase PF5 Forward Note
PF6 Reply PF7 Resend PF8 Print PF9 Help PF10 Next PF11 Previous PF12 Return
4BÜ Aa B1--SESSION1 R 23 C 30 o-oP1 9:59 6/13/90

09109 CFA 744

DataChem

ANALYTICAL REPORT

Form ARF-AL
Page 1 of 2
Part 1 of 1

Date 10/11/89
Agency Identification Number S89-0666-BB
Account No. 03018

EG&G Idaho - INEL
P.O. Box 1625
Idaho Falls, ID 83415-2109
Attention: Charles W. Ariss

Telephone (208) 526-9055

Sampling Collection and Shipment

Sampling Site _____ Date of Collection September 29, 1989

Date Samples Received at DataChem October 03, 1989

Analysis

Method of Analysis 8015

Date(s) of Analysis October 05, 1989

Analytical Results

Field Sample Number	DataChem Lab Number	Sample Type	Total Petroleum Hydrocarbons µg/g							
CFA-743-1	EI 2981	SOIL	ND*							
CFA-743-2	EI 2982	SOIL	4.							
CFA-743-3	EI 2983	SOIL	9.							
CFA-744-1	EI 2984	SOIL	3.							
CFA-744-2	EI 2985	SOIL	7.							
CFA-744-3	EI 2986	SOIL	76.							
MS	EI 2987	SOIL	6.							
MSD	EI 2988	SOIL	6.							
* Limit of Detection			2.							

* See comment on last page.
ND Parameter not detected.
NR Parameter not requested.

** Parameter not analyzed(See comment on last page).
( ) Parameter between LOD and LOQ.

Analyst: Kathleen Knaub

Reviewer: J.M. Barton

Laboratory Supervisor: J.M. Barton

DataChem

ANALYTICAL · REPORT

Date 10/11/89

Agency Identification Number S89-0666-BB

General Set Comments

Samples EI2987 and EI2988 are matrix spikes of sample EI2981 to which 6.ug/g of dodecane has been added.

09111

VIEW THE NOTE E01

From: LAS --INELVM1 Date and time 06/13/90 09:03:21
JOC --INELVM1 J E COODY

From: LAS
Subject: ANALYSIS OF SLUDGE SAMPLES.

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PF1 Alternate PFs PF2 File NOTE PF3 Keep PF4 Erase PF5 Forward Note
PF6 Reply PF7 Resend PF8 Print PF9 Help PF10 Next PF11 Previous PF12 Return
4BÜ Aa B1--SESSION1 R 23 C 30 o-oP1 9:59 6/13/90

REMOVAL AND DISPOSITION CHECKLIST [1]

TANK NUMBER CFA 744

Doc. #		Received
1)	SWR Traveler Documentation	_____
	Tank Cut Down Complete: YES _____ NO _____ DATE	_____
2)	Tank Disposition Form Erased Current 04/05/90	_____
3)	Certificate of Destruction	_____
4)	Tank Removal Photographs	X
5)	Tank Disposal Photographs	_____
6)	Tank Replaced YES _____ NO _____	
	Replacement Tank Number	_____

[1] Revised 2/1/91

CFH 244
& 743
mixed.
per Ron [illegible] photo

89-564-1

Waste oil Tank Removal

This is [illegible] contact sheet.
It has not been corrected for color, density and/or contrast.


CF-665
DATE 9-29-89
ASSIGNMENT Waste Oil Tank Removal
89-564-3
FILE NO
STYLE NO. 35-7B
2 GOLD 200-2
3 KODAK 5096
4 GOLD 200-2
5 KODAK 5096
6 GOLD 200


9-29-89
Waste Oil Tank Removal
89-564-2

INVENTORY RECONCILIATION CHECKLIST [1]

TANK NUMBER CFH 744

Doc. #		Received
1)	Inventory Control Records	
2)	Vapor Monitoring Reports	

[1] Revised 2/1/91